

Claims

1. A spring-elastic measuring element (1) particularly for thermometers, pressure switches or manometers, comprising an arc- or screw-shaped measuring tube (3) connected, particularly welded at one end to a base body (2), and at the other end joined with a connecting leg for the measuring mechanism, characterized in that the connection between the measuring tube (3) and the base body (2) and/or connecting leg (10) is indirectly established by means of a weldable connecting element (11, 12).
2. The spring-elastic measuring element according to claim 1, characterized in that the connecting element (11, 12) is a flat and thin-walled single component.
3. The spring-elastic element according to claim 1 or 2, characterized in that a welding seam is produced between the connecting elements (11, 12) and the measuring tube (3), extending through the connecting element (11, 12) up to the face area of the measuring tube (3).
4. The spring-elastic measuring element according to claim 1, characterized in that the connecting elements (11, 12) and the measuring tube (3) jointly form one single piece, and are producible by widening and flanging of the measuring tube (3).

5. The spring-elastic measuring element according to claim 1, 2, 3 or 4, characterized in that the connecting elements (11, 12) are adapted to the cross section of the measuring tube (3) to an extent such that a protruding edge is formed, the latter extending at least in part, preferably fully over the periphery.

6. The spring-elastic measuring element according to one or more of claims 1, 2, 3 and 4, characterized in that the connecting elements (11, 12) are joined with the measuring tube (3) by welding seams (15, 16), on the one hand, and with the base body (2) or connecting leg by a second welding seam (14) on the other.

7. The spring-elastic measuring element according to one or more of claims 1 to 6, characterized in that two welding seams (14 and 15 or 14 16) separated from one another in terms of space are present.

8. The spring-elastic measuring element according to one or more of claims 1 to 7, characterized in that the connecting element (11, 12) consists of the same material as the base body (2) or of a welding additive material.

9. The spring-elastic measuring element according to one or more of claims 1 to 8, characterized in that the welding seams (14, 15, 16) are producible by laser or electron beam welding.

10. A method for producing a connection between a measuring tube (3) and a base body (2) and/or connecting leg according to one or more of claims 1 to 9, characterized by the use of a weldable connecting element (11, 12) formed by widening and flanging of the measuring tube (3), or joined as an individual component with the measuring tube (3) by a welding seam, for example a laser welding or electron beam welding seam, whereby the welding seam (15, 16) is produced extending through the connecting element (11, 12) up to the face areas of the measuring tube (3), and whereby the protruding marginal zone of the connecting element (11, 12) is joined with the base body (2) or connecting leg by means of a second welding seam (14).

11. The method according to claim 10, characterized by two welding seams (14, 15, 16) extending separated from one another in terms of space.